

Energy Northwest Briefing 2014 BPA Integrated Program Review

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Agenda

• Introduction

Long Range Plan

Value Optimization Project

Rate Case Overview

Columbia Generating Station's Challenges

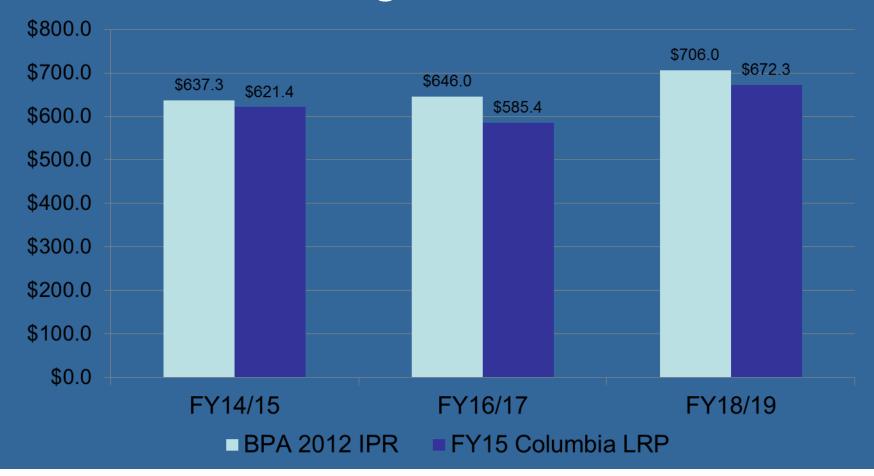


Introduction

- Integrated Program Review (IPR) Budget Overview
- Long Range Plan (LRP) Commitment
- Value Optimization Project (VOP)
- Fukushima Progress Update



Columbia Changes to IPR





IPR Overview

- Current Approved Plan (2012 IPR)
 - FY14/15 = \$637.3 million
 - FY16/17 = \$646.0 million
 - FY18/19 = \$706.0 million
- Current Columbia LRP
 - FY14/15 = \$621.4 million (\$15.9 million decrease)
 - FY16/17 = 585.4 million (\$60.6 million decrease)
 - FY18/19 = \$672.3 million (\$33.7 million decrease)



How do we get there?

- BPA Rate Periods 14/15, 16/17, and 18/19
 - 1) Continued Excellence in Plant Operation
 - 2) Maintain the Plant and Replace Equipment per the LRP
 - 3) Aggressively Implement the VOP
 - DOE Waste Fund Collection Ceased on May 16, 2014
 - 5) Hire and Retain Excellent Staff



Other Opportunities & Issues

- Columbia Debt restructuring could significantly reduce Columbia's future annual debt service payments.
- Other Energy Northwest regional debt restructuring could further reduce annual BPA debt service obligations.
- Fukushima Update





Long Range Plan

Ron Hogue, Business Planning Manager

Long Range Plan - Objective

The Columbia Generating Station (Columbia) Long Range Plan (LRP) will identify and levelize resource requirements to maintain Columbia safety and reliability over a ten-year planning horizon.



LRP - Methodology

- Updated Annually Rolling 10-Year Forecast
- Potential Needs are Evaluated:
 - AR-EVAL, Technical Evaluation, Priority Ranking Matrix.
 - Design Sub-Committee (DSC) screens for need, technical justification, rank, and timing. Approves, Cancels, or Returned for Additional Information.
 - DSC assigns to Project Owner; Project Owner develops Project Proposal Form (PPF); Rough Order of Magnitude estimate developed.
 - Project Review Committee (PRC), reviews PPF presentations; approves for entry to LRP; defines timing; may cancel.
- PRC Approved Projects are entered into the LRP
- Projects are "levelized" to available budgets by rank and or Management Discretion
- The LRP process is guided by a formal procedure and is an essential part of Energy Northwest's budgeting and planning.



LRP - Assumptions

- VOP is incorporated into the FY15 LRP
- Approved long range plans from the PRC, Information Technology PRC, and Facilities PRC
- Includes estimated Fukushima impacts
- Excludes extraordinary facility projects
- 2.75% escalation for labor
- ≥ 2.5% escalation for non-labor



| | 2014 | 201 | 5 | 201 | 6 | 2017 | 201 | 8 | 201 | 19 | 202 | 0 | 20: | 21 | 202 | 22 | 20 | 23 | 202 | 24 | 2025 |
|---|------|---------|-------|--------|-------------|--------|-------------|----|---------|-----|-----------|----|---------|----|-----------|----|---------|-----|------------|----|---------|
| Item Description (Final FY 15 Blue w\NRC fee increase) | _ | FY15 | F' | Y16 | FY17 | | FY18 | | FY19 | | FY20 | | FY21 | | FY22 | | FY23 | | FY24 | 匚 | FY25 |
| BPA F | Rate | BPA | Rate | Period | E | PA F | Rate Period | | BPA | Rat | te Period | | BPA | Ra | te Period | | BP | A F | ate Period | | |
| Direct and Indirect O&M Costs | | | | | | | | Г | | Г | | | | Г | | | | Г | | П | |
| Baseline Costs | \$ | 126,603 | \$ 12 | 22,162 | \$ 118,0 | 43 | \$ 122,025 | \$ | 123,924 | \$ | 125,479 | \$ | 122,159 | \$ | 124,985 | \$ | 122,076 | \$ | 122,034 | \$ | 117,085 |
| Outage Costs (Incremental) | | 27,722 | | - | 27,5 | 00 | - | | 27,500 | | - | | 27,500 | | | | 27,500 | | - | | 27,500 |
| Admin / General (A&G) | l | 67,185 | 6 | 60,020 | 62,4 | 99 | 60,788 | ı | 63,274 | ı | 70,370 | | 72,230 | ı | 73,828 | | 74,560 | ı | 73,573 | ı | 76,031 |
| O&M Projects | l | 46,771 | | 9,079 | 29,1 | 19 | 5,913 | ı | 41,699 | ı | 9,955 | | 41,544 | ı | 12,706 | | 41,908 | ı | 8,831 | ı | 45,329 |
| Facilities O&M Projects | l | 110 | | 912 | 9 | 12 | 912 | ı | 912 | ı | 912 | | 912 | ı | 912 | | 912 | ı | 912 | ı | 912 |
| O&M Risk Reserve | | 2,500 | | 3,000 | 5,0 | 00 | 3,000 | | 26,605 | | 19,228 | | 15,129 | | 16,141 | | 17,186 | | 23,500 | | 5,000 |
| Subtotal Direct & Indirect O&M Costs | \$ | 270,891 | \$ 19 | 95,173 | \$ 243,0 | 73 | \$ 192,638 | \$ | 283,914 | \$ | 225,944 | \$ | 279,474 | \$ | 228,572 | \$ | 284,142 | \$ | 228,850 | \$ | 271,857 |
| Escalation on Direct & Indirect (2.5%) | l | | | 5,215 | 9,8 | 03 | 9,688 | ı | 36,622 | ı | 33,791 | | 55,142 | ı | 49,053 | | 77,142 | ı | 73,987 | ı | 109,790 |
| Total Direct & Indirect O&M Costs (includes escalation) | \$ | 270,891 | \$ 20 | 00,388 | \$ 252,8 | 76 | \$ 202,326 | \$ | 320,536 | \$ | 259,735 | \$ | 334,616 | \$ | 277,625 | \$ | 361,284 | \$ | 302,837 | \$ | 381,647 |
| Capital Costs | | | | | | | | | | | | | | | | | | | | _ | |
| PRC Capital Projects | \$ | 72,384 | \$ 7 | 75,412 | \$ 89,1 | 39 | \$ 48,067 | \$ | 53,271 | \$ | 24,807 | \$ | 27,625 | \$ | 16,450 | \$ | 27,318 | \$ | 33,889 | \$ | 38,100 |
| Moveable Capital & Downtown Capital Projects | \$ | 992 | \$ | 1,545 | \$ 1,5 | 45 | \$ 1,545 | \$ | 1,545 | \$ | 1,507 | \$ | 1,507 | \$ | 1,507 | \$ | 1,507 | \$ | 1,507 | \$ | 1,507 |
| Facilities Capital Projects | \$ | 1,150 | \$ | 548 | \$ 5 | 79 | \$ 579 | \$ | 579 | \$ | 565 | \$ | 565 | \$ | 565 | | 565 | \$ | | \$ | 565 |
| Information Technology Capital Projects | \$ | 8,577 | \$ 1 | 10,392 | \$ 8,6 | 09 | \$ 10,615 | \$ | 9,677 | \$ | 10,981 | \$ | 10,287 | \$ | 9,964 | \$ | 10,101 | \$ | 10,803 | \$ | 10,803 |
| Admin / General (A&G) | \$ | 13,855 | \$ 1 | 16,325 | \$ 17,3 | 84 | \$ 16,604 | \$ | 16,161 | \$ | 8,617 | \$ | 9,294 | \$ | 6,859 | \$ | 9,043 | \$ | 9,416 | \$ | 10,000 |
| Capital Risk Reserve | \$ | 442 | \$ | 3,279 | \$ 6,5 | 04 | \$ 1,556 | \$ | 1,850 | \$ | 9,890 | \$ | 9,088 | \$ | 6,607 | \$ | 10,200 | \$ | 11,379 | \$ | 11,000 |
| Fukushima Impacts | \$ | 9,994 | \$ | 7,480 | \$ 11,6 | 70 | \$ 12,110 | \$ | 11,700 | ı | - | | | ı | - | | | ı | | ı | |
| Management Discretion-Special Projects** | \$ | - | \$ | 250 | \$ 1,2 | 50 | \$ 1,250 | \$ | 1,000 | \$ | 1,000 | \$ | 2,801 | \$ | 4,301 | \$ | 2,701 | \$ | 5,801 | \$ | _ |
| Subtotal Capital Costs | \$ | 107,394 | \$ 11 | 15,231 | \$ 136,6 | 80 | \$ 92,326 | \$ | 95,783 | \$ | 57,367 | \$ | 61,167 | \$ | 46,253 | \$ | 61,435 | \$ | 73,360 | \$ | 71,975 |
| Escalation on Capital (2.5%) | | | \$ | 2,881 | \$ 6,9 | 19 | \$ 7,099 | \$ | 9,944 | \$ | 7,538 | \$ | 9,768 | \$ | 8,727 | \$ | 13,418 | \$ | 18,257 | \$ | 20,159 |
| Total Capital Costs (includes escalation) | \$ | 107,394 | \$ 11 | 18,112 | \$ 143,5 | 99 | \$ 99,425 | \$ | 105,727 | \$ | 64,905 | \$ | 70,935 | \$ | 54,980 | \$ | 74,853 | \$ | 91,617 | \$ | 92,134 |
| Fuel Related Costs | П | | | | | \neg | | Г | | Г | | | | Г | | | | Г | | Г | |
| Nuclear Fuel Amortization | l | 44,326 | | 58,212 | 51,6 | 31 | 61,621 | ı | 54,740 | ı | 63,431 | | 56,337 | ı | 65,207 | | 58,976 | ı | 67,117 | ı | 60,745 |
| Spent Fuel Fee | l | 7,594 | | 8,956 | 7,9 | 01 | 8,932 | ı | 7,899 | ı | 8,918 | | 7,867 | ı | 8,894 | | 7,989 | ı | 8,894 | ı | 7,989 |
| Subtotal Fuel Related Costs | \$ | 51,920 | \$ 6 | 67,168 | \$ 59,5 | 32 | \$ 70,553 | \$ | 62,639 | \$ | 72,349 | \$ | 64,204 | \$ | 74,101 | \$ | 66,965 | \$ | 76,011 | \$ | 68,734 |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | Т | | Г | | Г | | | | Г | | | | Г | | П | |
| Total Unescalated Budget | \$ | 430,205 | \$ 37 | 77,572 | \$ 439,2 | 85 | \$ 355,517 | \$ | 442,336 | \$ | 355,660 | \$ | 404,845 | \$ | 348,926 | \$ | 412,542 | \$ | 378,221 | \$ | 412,566 |
| Total Escalation | l | - | l | 8,095 | 16,7 | 23 | 16,787 | ı | 46,566 | l | 41,329 | l | 64,909 | ı | 57,780 | | 90,560 | l | 92,244 | ı | 129,950 |
| Total Cost - Industry Basis | \$ | 430,205 | \$ 38 | 85,667 | \$ 456,0 | 08 | \$ 372,304 | \$ | 488,902 | \$ | 396,989 | \$ | 469,754 | \$ | 406,706 | \$ | 503,102 | \$ | 470,465 | \$ | 542,516 |
| | | | | | | \neg | | | | | | | | | | | | | | | |
| Total Net Generation (Gwh) | I | 8,422 | l | 9,628 | 8,6 | 86 | 9,755 | ı | 8,686 | ı | 9,782 | l | 8,686 | ı | 9,755 | | 8,686 | ı | 9,782 | i | 8,686 |
| Outage Days | I | 42 | l | | | 40 | | ı | 40 | ı | | l | 40 | ı | | | 40 | ı | | i | 40 |
| | I | | l | | | | | ı | | ı | | l | - | ı | | | - | l | | ĺ | |
| Cost of Power (Cents per kWh, constant FY14\$) | \$ | 5.11 | \$ | 3.92 | \$ 5 | 06 | \$ 3.64 | \$ | 5.09 | \$ | 3.64 | \$ | 4.66 | \$ | 3.58 | \$ | 4.75 | \$ | 3.87 | \$ | 4.75 |
| Cost of Power (Cents per kWh, escalated) | \$ | 5.11 | \$ | 4.01 | \$ 5 | 25 | \$ 3.82 | \$ | 5.63 | \$ | 4.06 | \$ | 5.41 | \$ | 4.17 | \$ | 5.79 | \$ | 4.81 | \$ | 6.25 |

Key Assumption/Qualifications (Revision - 5/19/14, includes FY 15 rev on OM contingency and NRC fee increase \$1.032M all years)

Escalation Rate = Labor 2.75% and Non-labor 0% in FY 15, 2.5% starting FY 16 - 18. Generation assumes 1% unplanned/ 2% planned loss.



^{*} Recover 10 MWe from Instrument Fouling in FY 16, 18 MWe from Appendix K in FY 17 (FY 15 Net 1120, FY 16 Net 1130, FY 17 Net 1148)

^{**} Includes Fukushima Filter Requirement Risk

LRP Challenges

- Fukushima
- Turbine Replacement
- Plant Aging/Obsolescence
- Increased investment in life cycle projects
- License Extension Implementation
- Regulatory Oversight of Columbia
- Benefits expected to escalate at a higher rate
- A managed attrition plan will be required to meet commitments





Value Optimization Project

Johnathan Hicks, Budget Supervisor

Value Optimization Project - Background

- Value Optimization Project (VOP) approved by Senior Management in December 2013.
- Mission Achieve Top Quartile O&M Cost Performance in FY18 as measured by Electric Utility Cost Group data against our Peer Plants
- Components include use of lower escalation rates, staff reductions, non-labor and outage incremental reductions, and capitalization policy changes



VOP - Update

- The VOP is On Track
- The VOP has been integrated into the FY15 Budget resulting in a \$6.8 million O&M Cost reduction from the FY14 LRP
- The FY15 LRP includes a BPA 16/17 Rate Case two-year saving of \$44.8 million resulting directly from the project
- Goodnight Consulting is Working to Update/Validate the 2011 Staff Study



VOP – Update

- Steering Committee has been established for The VOP on 4/15/14
- Senior Project Sponsor Brad Sawatzke
- Financial Sponsor Brent Ridge
- Project Coordinator Ron Hogue
- Staffing Coordinator Steve Lorence
- Cumulative Impact Coordinator Carl King





Rate Case Overview

Jim Gaston, Asset Manger/Controller

Columbia IPR Cost Elements

- Operations & Maintenance
- Fuel Disposal Fees
- Spares/Inventory Adjustments
- Generation Taxes
- Fuel Procurement
- Independent Spent Fuel Storage Decommissioning Fund
- Decommissioning Fund
- NEIL Insurance



Columbia Changes to IPR





Fiscal Year 14/15

| BPA FY | FY12 IPR | FY15 CGS | Total Delta |
|-----------------------------|-----------|-----------|-------------|
| Columbia O&M | \$484,594 | \$474,997 | (\$9,597) |
| Fuel Disposal | \$16,444 | \$7,951 | (\$8,493) |
| Spares/Inventory Adj | \$11,750 | \$11,750 | \$0 |
| Generation Tax | \$9,692 | \$9,437 | (\$255) |
| Subtotal O&M | \$522,480 | \$504,135 | (\$18,345) |
| Fuel | \$100,996 | \$102,339 | \$1,343 |
| Total Columbia Controllable | \$623,476 | \$606,474 | (\$17,002) |
| | | | |
| Fuel Litigation | | \$1,091 | \$1,091 |
| ISFSI Decomm Fund | \$236 | \$252 | \$16 |
| Total Columbia | \$623,712 | \$607,817 | (\$15,895) |
| | | | |
| Decommissioning | \$6,597 | \$6,597 | \$0 |
| NEIL Insurance | \$7,000 | \$7,000 | \$0 |
| Total IPR | \$637,309 | \$621,414 | (\$15,895) |



Fiscal Year 16/17

| BPA FY | FY12 IPR | FY15 CGS | Total Delta |
|-----------------------------|-----------|-----------|-------------|
| Columbia O&M | \$503,222 | \$453,749 | (\$49,473) |
| Fuel Disposal | \$16,719 | \$0 | (\$16,719) |
| Spares/Inventory Adj | \$11,500 | \$11,500 | \$0 |
| Generation Tax | \$11,251 | \$10,737 | (\$514) |
| Subtotal O&M | \$542,692 | \$475,986 | (\$66,706) |
| Fuel | \$88,948 | \$93,159 | \$4,211 |
| Total Columbia Controllable | \$631,640 | \$569,145 | (\$62,495) |
| | | | |
| Fuel Litigation | | \$767 | \$767 |
| ISFSI Decomm Fund | \$255 | \$289 | \$34 |
| Total Columbia | \$631,895 | \$570,201 | (\$61,694) |
| | | | |
| Decommissioning | \$7,136 | \$7,136 | \$0 |
| NEIL Insurance | \$7,000 | \$8,085 | \$1,085 |
| Total IPR | \$646,031 | \$585,422 | (\$60,609) |



Key Issues

- ➤ The O&M forecast is based on escalation of 2.75% labor and 2.5% non-labor.
- Headcount Current Staffing Plan under Evaluation (Goodnight)
- Future Life Cycle Management issues will be evaluated based on 2044 not 2024.
- Fukushima still many unknowns.



Questions?





Financial Disclosure

This information has been made publicly available by BPA on June 13, 2014 and contains information not reported in agency financial statements.

